Infineon Docket No. OC Docket No. Express Mail No. 2003P52883US INFN/0029 EV331235137US

MULTIPLE DATA RATE BUS USING RETURN CLOCK

ABSTRACT OF THE DISCLOSURE

A method and apparatus for ensuring safe transmission of data on a bus line. In one embodiment, within a given clock period, first data is driven on a data bus and a strobe signal is transmitted, via a first signal path, to a receiving circuit indicating the validity of the first data on the data bus. A return signal received within the given clock period indicates an assumed arrival of the strobe signal at the receiving circuit. In response to receiving the return signal, second data is driven onto the data bus.